



Department of  
Primary Industries and  
Regional Development

Protect  
Grow  
Innovate



# Polyphagous shot-hole borer

Spot it, report it!



# About PSHB

Polyphagous shot-hole borer (PSHB) is a tiny, wood-boring invasive beetle that excavates tunnels, or galleries, in the trunk and branches of trees. PSHB introduces a *Fusarium* fungus into these tunnels, which it cultivates as a food source.

The fungus spreads inside the galleries and disrupts the plant vascular system and the flow of water and nutrients. The galleries also reduce the structural integrity of branches. This leads to branch failure and tree death.

## Symptoms to look for:



Shot-holes



Galleries

# Stop the spread

A **Quarantine Area** is in place across the Perth metropolitan area to prevent the spread of PSHB and protect WA's valuable agricultural industry and regional areas.

To stop the spread of the shot-hole borer, people living and working in, or travelling from the Perth metropolitan area must adhere to Quarantine Area requirements and restrictions. This includes restrictions on the movement of untreated and unseasoned wood, green waste and live plants.

PSHB does not move far on its own but can be transported long distances when people move infested plant material, including firewood.



**Scan the QR code  
for an interactive  
Quarantine Area map  
and more information.**



Dieback

# Detecting PSHB

Detection of PSHB can be difficult as they are very small – about the size of a sesame seed! Instead of looking for the beetle, we look for the damage they cause to the tree.

**Shot-holes:** perfectly round and 1 mm in diameter

**Galleries:** dark tunnels inside the branches or trunk

**Dieback:** wilting or loss of leaves

**Staining:** discolouration of the bark around shot-holes

**Frass:** sawdust pushed out during the beetles tunnelling

**Gumming:** sap or resin formed as the trees' response to damage



Staining

# Affected plant species

PSHB impacts a wide variety of plant species, with a known host range of over 500 species globally.

While the shot-hole borer attacks a wide range of plants, it does have preferred species.

The following species have been identified as being extremely susceptible to attack by PSHB:

- Box elder maple (*Acer negundo*)
- Black locust (*Robinia pseudoacacia*)
- Coral tree (*Erythrina x sykesii*)

It is recommended to avoid planting these species to reduce the impact and risk of further spread of PSHB.

For the full list of affected plant species, visit [dpird.wa.gov.au/pshb](https://dpird.wa.gov.au/pshb)



Frass/sawdust



Gumming

# Report suspected PSHB

Early detection of PSHB infestation will help protect WA's tree canopy.

If you find or suspect the presence of PSHB:

- take clear photographs of the symptoms
- include a ruler or pen in the photographs for scale.

## Report your observations

MyPestGuide® Reporter

via app or online

[mypestguide.dpird.wa.gov.au/reporter](https://mypestguide.dpird.wa.gov.au/reporter)

Pest and Disease Information Service

08 9368 3080

[padis@dpird.wa.gov.au](mailto:padis@dpird.wa.gov.au)



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